

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

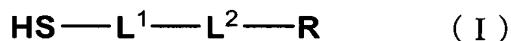
1. (Currently Amended) A method for immobilizing nucleic acid on a solid phase-substrate ~~by co-adsorption~~, comprising:

forming a composition comprising:

a total concentration of 0.1 to 2  $\mu$ M of a nucleic acid as a probe, and

a compound or a salt thereof, the compound being represented by the

following formula:



where:

$\text{L}^1$  is a single bond or an alkylene group having 1 to 15 carbon atoms;

$\text{L}^2$  is selected from the group consisting of a single bond, a nucleic acid, a polyethylene glycol group, -CO-NH-, and -NH-CO-;

R is selected from the group consisting of a hydroxyl group, an amino group, a ferrocenyl group, and a carboxyl group; and

$\text{L}^1$  and  $\text{L}^2$  are not both single bonds;

then bringing the solid phase substrate into contact with the composition; and

incubating the composition in contact with a surface of the solid phase

~~substrate, substrate to immobilize the nucleic acid and the compound or the salt thereof on the solid phase substrate by co-adsorption,~~

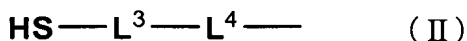
wherein the composition comprises a nucleic acid and a compound represented by formula I ~~in at~~ a ratio of 40/60 to 60/40.

2. (Previously Presented) The method according to claim 1, wherein:

$$\text{HS} - \text{L}^3 - \text{L}^4 - \quad (\text{II})$$
$$\text{HS}-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{CH}_2-\text{L}^4- \quad (\text{III})$$

9. (Previously Presented) The method according to claim 1, wherein R in the compound represented by formula I is a hydroxyl group.
10. (Withdrawn) The method according to claim 1, wherein  $L^1$  in the formula I is a single bond, and  $L^2$  is a polyethylene glycol group.
11. (Previously Presented) The method according to claim 1, wherein  $L^1$  in the compound represented by formula I is an alkylene group having 4 to 8 carbon atoms, and  $L^2$  is a single bond.
12. (Previously Presented) The method according to claim 1, wherein the formula represented by compound I is 6-mercapto-1-hexanol.
13. (Original) The method according to claim 1, wherein the solid phase substrate is a single layered substrate or a multiple layered substrate comprising at least one material selected from the group consisting of glass, polymer resin and metal.
14. (Previously Presented) The method according to claim 1, wherein a surface of the solid phase substrate on which nucleic acid is adsorbed is coated with a thin gold film.
15. (Previously Presented) The method according to claim 1, wherein the solid phase substrate comprises a glass substrate and a thin gold film vapor-deposited on a surface of the glass substrate.
16. (Previously Presented) The method according to claim 1, wherein the nucleic acid as the probe has a base length of 15 to 30 nucleotides.
17. (Original) The method according to claim 1, wherein the incubation is carried out at a temperature of 25°C to 40°C.
18. (Currently Amended) The method according to claim 1, wherein:  
the nucleic acid as the probe comprises:

a single-stranded polynucleotide or oligonucleotide comprising nucleotides selected from the group consisting of DNA, RNA, and PNA; and at ~~the~~ a 3' end or ~~the~~ a 5' ~~end~~ end, a group represented by the following formula:



wherein  $\text{L}^3$  is an alkylene group, and  $\text{L}^4$  is a single bond or a spacer; the formula represented by compound I is 6-mercapto-1-hexanol; the total concentration of the nucleic acid and 6-mercapto-1-hexanol in the composition is 0.5 to 1.5  $\mu\text{M}$ ; and the solid phase substrate comprises a glass substrate and a thin gold film vapor-deposited on a surface of the glass substrate.

19-25. (Canceled)